

Product datasheet for RC206860

HPD (NM_002150) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	HPD (NM_002150) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	HPD
Synonyms:	4-HPPD; 4HPPD; GLOD3; HPPDASE; PPD
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC206860 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGACGACTTACAGTGACAAAGGGGCAAAGCCTGAGAGAGGCCGATTCTCCACTTCCACTCTGTGACCT
TCTGGGTTGGCAACGCCAAGCAGGCCGCGTCATTCTACTGCAGCAAGATGGGCTTTGAACCTTAGCCTA
CAGGGGCTGGAGACCGGTTCCCGGGAGGTGGTCAGCCATGTAATCAAACAAGGGAAGATTGTGTTGTC
CTCTCCTCAGCGCTCAACCCCTGGAACAAAGAGATGGGCGATCACCTGGTAAAACACGGTGACGGAGTGA
AGGACATTGCGTTCGAGGTGGAAGATTGTGACTACATCGTGCAGAAAGCACGGGAACGGGGCCAAAAT
CATGCGGGAGCCCTGGGTAGAGCAAGACAAGTTTGGGAAGGTGAAGTTTGTGTGCTGCAGACGTATGGG
GACACCACACACCCCTGGTGGAGAAGATGAACTACATCGGCCAATTCTTGCCTGGATATGAGGCCCCAG
CGTTTCATGGACCCCTACTTCTAAACTGCCAAATGCAGTCTGGAGATGATCGACCACATTGTGGGAAA
CCAGCCTGATCAGGAGATGGTGTCCGCCTCCGAATGGTACCTGAAAACTGCAGTTCACCCGCTTCTGG
TCCGTGGATGACACGCAGGTGCACACGGAATATAGCTCTTCCGATCCATTGTGGTGGCCAACTATGAAG
AGTCCATCAAGATGCCATCAATGAGCCAGCGCCTGGCAAGAAGAAGTCCAGATCCAGGAATATGTGGA
CTATAACGGGGGCGCTGGGTCCAGCACATCGCTCTCAAGACCGAAGACATCATCACAGCGATTCCGCCAC
TTGAGAGAGAGGCCTGGAGTTCTTATCTGTTCCCTCCACGTAACAACAACCTGCGGGAGAAGCTGA
AGACGGCCAAGATCAAGGTGAAGGAGAACATTGATGCCCTGGAGGAGCTGAAAATCCTGGTGGACTACGA
CGAGAAAGGCTACCTCCTGCAGATCTTACCAAACCGGTGCAGGACCGGCCACGCTCTTCTGGAAGTC
ATCCAGCGCCACAACCACAGGGTTTTGGAGCCGCAACTTCAACTCACTGTTCAAGGCTTTCGAGGAGG
AGCAGAACCTGCGGGTAACCTACCAACATGGAGACCAATGGGGTGGTCCCGGCATG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC206860 protein sequence
Red=Cloning site Green=Tags(s)

MTTYSKDGAKPERGRFLHFHSVTFWVGNKQAASFYCSKMGFEPLAYRGLTGSREVVSHVIKQKIVFV
 LSSALNPWNKEMGDHLVKHGDGVKDI AFEVEDCDYIVQKARERGAKIMREPWVEQDKFGKVKFAVLQTYG
 DTHTLVKEMNYIGQFLPGYEAPAFMDPLLKLPKCSLEMIDHIVGNQPDQEMVSASEWYLNQLQFHRFW
 SVDDTQVHTEYSSLRISIVVANYEESIKMPINEPAPGKKKSQIQEYVDYNGGAGVQHIALKTEDIITAIRH
 LRERGLEFLSVPSTYYKQLREKLTAKIKVKENIDALEELKILVDYDEKGYLLQIFTKPVQDRPTLFLEV
 IQRHNHQGFAGNFNLSLFAFEEQNL RGNLTNMETNGVVPGM

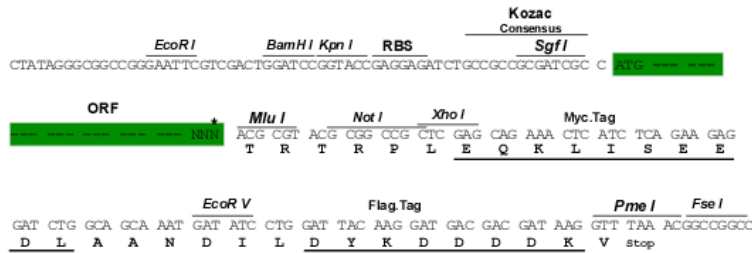
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6426_a03.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_002150

ORF Size: 1179 bp

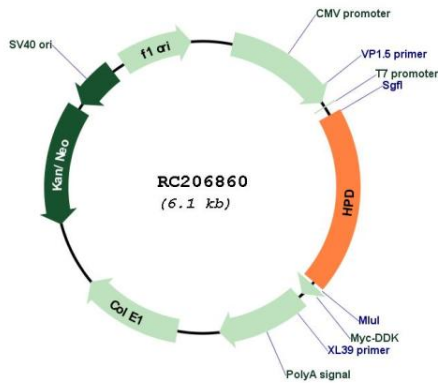
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

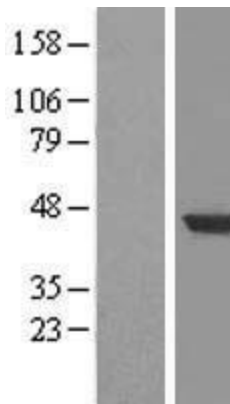
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:	<ol style="list-style-type: none">1. Centrifuge at 5,000xg for 5min.2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.3. Close the tube and incubate for 10 minutes at room temperature.4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_002150.2 , NP_002141.1
RefSeq Size:	1440 bp
RefSeq ORF:	1182 bp
Locus ID:	3242
UniProt ID:	P32754
Cytogenetics:	12q24.31
Domains:	Glyoxalase
Protein Families:	Druggable Genome
Protein Pathways:	Metabolic pathways, Phenylalanine metabolism, Tyrosine metabolism, Ubiquinone and other terpenoid-quinone biosynthesis
MW:	44.9 kDa
Gene Summary:	The protein encoded by this gene is an enzyme in the catabolic pathway of tyrosine. The encoded protein catalyzes the conversion of 4-hydroxyphenylpyruvate to homogentisate. Defects in this gene are a cause of tyrosinemia type 3 (TYRO3) and hawkinsinuria (HAWK). Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jan 2010]

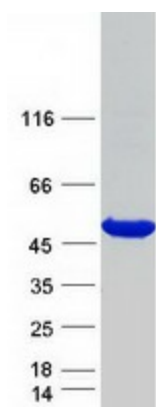
Product images:



Circular map for RC206860



Western blot validation of overexpression lysate (Cat# [LY419503]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC206860 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified HPD protein (Cat# [TP306860]). The protein was produced from HEK293T cells transfected with HPD cDNA clone (Cat# RC206860) using MegaTran 2.0 (Cat# [TT210002]).